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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* C. DOUGLASS THOMAS, ALBERT S. PENILLA, and  
JOSEPH A. NGUYEN

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Appeal 2006-2758  
Application 09/098,279<sup>1</sup>  
Technology Center 2600

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Decided: January 14, 2008

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Before JAMES D. THOMAS, *Administrative Patent Judge*, and  
FRED E. McKELVEY, *Senior Administrative Patent Judge*, and  
ALLEN R. MACDONALD, JEAN R. HOMERE, and JOHN A. JEFFERY,  
*Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> This Application was filed on June 16, 1998. It claims priority based on provisional application 60/051,489 filed on July 01, 1997. The real party in interest is the inventive entity captioned above.

## STATEMENT OF THE CASE

A merits panel of the Board entered a decision on appeal on December 21, 2006. *Ex parte Thomas*, Appeal 2006-2758 (Bd. Pat. App. & Int. Dec. 21, 2006). An appeal from that decision was timely taken to the U.S. Court of Appeals for the Federal Circuit. In due course, the Federal Circuit entered a mandate remanding to the Board for further proceedings. *In re Thomas*, No. 2007-1237 (Fed. Cir. June 8, 2007). An expanded panel now proceeds to implement the Federal Circuit's mandate.

Appellants appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1, 2, 4, 5, 7 through 9, 11 through 18, 26 through 31, 39 through 44, 47 through 50, and 52 through 66, all of which are pending in this application.<sup>2</sup> Appellants have canceled claims 3, 6, 10, 19 through 25, 32 through 38, 45, 46, and 51. We have jurisdiction under 35 U.S.C. § 6(b).

We note that Appellants (1) incorrectly designate the current Appeal Brief (filed February 3, 2006) as a "SUPPLEMENTAL APPEAL BRIEF TO APPEAL BRIEF FILED MAY 23, 2005," and (2) incorrectly incorporate therein by reference arguments previously submitted in the preceding Appeal Brief. (Br. 7, Reply Br. 1). The current Brief is intended to appeal an entirely different set of rejections from those previously appealed in

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<sup>2</sup> Appellants' Appendix A incorrectly indicates the status of claims 26 through 31, 39 through 44, 47 through 50, and 52 through 66 as being "withdrawn." As indicated in the "STATUS OF THE CLAIMS" section, (Br. 2), the Examiner withdrew the restriction requirement against these "withdrawn" claims in the Office Action of August 31, 2005 leading to the present appeal. Thus, these formerly "withdrawn" claims are now rejected and are pending in this appeal.

Appellants' earlier Briefs.<sup>3</sup> Further, we note that the Examiner withdrew all prior rejections, restrictions, and reopened prosecution in response to arguments presented in these earlier Appeal Briefs. Therefore, we will not be considering Appellants' arguments submitted in these earlier Briefs except to the extent that any such arguments are explicitly repeated in the current Brief.

We shall refer to Appellants' Brief filed on February 3, 2006, the Reply Brief filed on June 26, 2006, and the Examiner's Answer mailed on April 20, 2006.

#### Brief Description of the Invention

According to Appellants, the invention is a surveillance method and system for remotely monitoring the internal region of a building. Upon detecting a possible intrusion within the building, a computer automatically sends an electronic mail message including an image of the detected intrusion to the predetermined address of an interested user. (Spec. 3.)

A further understanding of the invention can be derived from exemplary independent claim 1, which reads as follows:

1. A surveillance method for operating a general purpose computer to provide remote surveillance of an internal area of a building, comprising:

receiving a surveillance image from a local camera directed at the internal area of the building;

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<sup>3</sup> Appellants filed two prior Appeal Briefs on May 26, 2005 and May 27, 2003 to appeal the Examiner's earlier rejections of the claims.

comparing the surveillance image with a reference image to produce a comparison result;

detecting presence of an activity condition based on the comparison result; and

notifying an interested user of the activity condition when the presence of the activity condition is detected,

configuring, prior to said receiving, comparing, detecting and notifying, said general purpose computing device so as to automatically notify the interested user via a predetermined mailing address when an activity condition is subsequently detected,

wherein said notifying includes at least transmitting the surveillance image to a remote computer over a global computer network automatically when the activity condition is detected, and

wherein said transmitting includes forming an electronic mail message having a predetermined mailing address, the predetermined mailing address being associated with the interested user and being provided during said configuring, and electronically mailing the surveillance image to the remote computer over the network using the electronic mail message.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Maeno	US 5,283,644	Feb. 1, 1994
Ng	US 5,731,832	Mar. 24, 1998
Glatt <sup>4</sup>	US 5,926,209	Jul. 20, 1999
Acosta <sup>5</sup>	US 6,166,729	Dec. 26, 2000

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<sup>4</sup> Omitted from the list of references relied upon, at page 3, section (8) of the Examiner's Answer.

<sup>5</sup> *Id.*

Parulski

US 6,573,927 B2

Jun. 3, 2003

### REJECTIONS ON APPEAL

The Examiner rejects the claims on appeal as follows:

A. Claims 1, 2, 4, 5, 7 through 9, 11 through 18, 26 through 31, 39 through 44, 47, and 48 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Ng and Maeno.<sup>6</sup>

B. Claims 1, 2, 4, 5, 7 through 9, 11, 12, 16 through 18, 26 through 31, 39 through 44, 47, and 48 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Ng and Parulski.<sup>7</sup>

C. Claims 13 through 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Ng, Parulski, and Glatt.

D. Claims 49, 50, and 52 through 61 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Ng and Acosta.

E. Claims 62 through 66 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Ng, Acosta, and Glatt.

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<sup>6</sup> The Examiner's statement of rejection inadvertently includes deleted claims 45 and 46. (Ans. 3, 8.)

<sup>7</sup> *Id.*

APPELLANTS' CONTENTIONS AND EXAMINER'S RESPONSE<sup>8</sup>

*Rejection A – Ng and Maeno*

Appellants contend that the Examiner's proffered combination of Ng and Maeno is improper to render the claimed invention unpatentable for the following reasons:

1) There is insufficient teaching, suggestion, or motivation of record that would lead one of ordinary skill in the art to arrive at such a combination. Specifically, Appellants argue:

The disparate teachings of Ng and Maeno would not motivate one skilled in the art to combine these reference (sic) in the manner that the Examiner proposes. As noted above, one skilled in the art reading Ng would not be motivated to look to Maeno, when Maeno itself uses old technology that is not capable of operatively performing the claimed operations.

(Br. 9.)

2) The Examiner's proffered motivation is either a product of hindsight or an improper obvious to try rejection. Specifically, Appellants argue:

Ng would not be advanced by combining it with the facsimile transmission of Maeno. There is simply no need or motivation to combine Maeno with Ng as proposed by the Examiner.

(Reply Br. 3.)

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<sup>8</sup> Appellants' Reply Brief in response to the Examiner's Answer presented numerous arguments (for the first time) that should have been presented in the Brief. The Answer necessarily does not address these arguments. However, we address them in this opinion.

3) Ng and Maeno do not teach providing a surveillance image with an electronic mail message to a predetermined mailing address upon detecting an activity condition. Specifically, Appellants argue:

The system of Maeno has nothing to do with surveillance images and makes no use of an electronic mail message to a predetermined mailing address of an interested use.

*(Id 2.)*

The Examiner made the following findings and reached the following conclusions:

1. The disclosures of Ng and Maeno are within the same field of endeavor. Further, based on the teachings of the cited references as a whole, one of ordinary skill in the art would have combined them to transmit an image from a local computer to a remote Computer via e-mail. Such a combination would allow a user to view images in real-time, and would thereby save time while reducing cost. (Ans. 6.)

2. The teachings of Ng and Maeno provide sufficient evidence to the skilled artisan to arrive to the proffered combination, and to thereby render the claimed invention unpatentable. (Ans. 19-20.)

3.a. Ng discloses a surveillance system having a camera that captures an image digitized into a video signal, and forwarded to an image processor to determine whether motion has occurred in the captured image. Upon detecting the occurrence of motion, the image processor automatically transmits the captured picture to an interested user (e.g., the police



department, security service) via a modem connected to a communication medium. (Ans. 18.)

3.b. Maeno discloses a system that, upon receiving an image from a terminal, automatically creates and sends an electronic mail message including the received image to the address of a predetermined user. (Ans. 18.)

*Rejection B – Ng and Parulski*

Appellants contend that the Examiner's proffered combination of Ng and Parulski is improper to render the claimed invention unpatentable for the following reasons:

1) Ng and Parulski do not teach automatically sending pictures to a predetermined address in response to detecting an activity condition. (Br. 11, Reply Br. 4-6.) Specifically, Appellants submit that Parulski teaches against automatically sending images upon detecting an activity condition since a user must select the images taken by a camera to be sent to another user. (Reply Br. 5.)

2) There is no teaching, suggestion, or motivation of record that would lead one of ordinary skill in the art to combine the references in the manner proposed by the Examiner. (Reply Br. 5.)

3) Parulski is non-analogous (not pertinent) art, and the functionality would be contrary to the claimed invention. (Reply Br. 4, 6.) Specifically, Appellants submit:

[T]he Office's attempt to reconstruct the missing element in Ng with Parulski fails, as the art is dissimilar, the functionality would not work for Ng and the functionality would be contrary to the operations that are presently claimed.

(Br. 11).

We understand Appellants' reference to the functionality of Parulski being contrary to the operation of Ng, and the claimed invention to mean that Parulski teaches away from Ng and the claimed invention.

4) The Examiner's proffered motivation is either a product of hindsight or an improper obvious to try rejection. (Reply Br. 6.)

5) Appellants' present application was filed June 16, 1998, and has domestic priority to U.S. Provisional Application No. 60/051,489, filed July 1, 1997. The Examiner has not established Parulski (filed November 24, 1997) as prior art since the record does not indicate that the February 20, 1997, provisional filing date of Parulski (U.S. Provisional Application No. 60/037,963) is being relied upon for the rejection. (Reply Br. 6.)

The Examiner made the following findings:

1. Parulski discloses a system whereupon a camera capturing an image, a computer automatically generates and transmits an electronic mail message including captured image to predetermined users (Ans. 21).

2. Taken as a whole, the combined teachings of Ng and Parulski would have provided an adequate reason for the ordinarily skilled artisan to transmit a captured image from a local computer to a remote computer via

e-mail. Such a combination would allow a user view captured images in real-time, and would thereby save time while reducing cost. (Ans. 11.)

*Rejection C – Ng, Parulski, and Glatt*

Appellants contend that the Examiner's proffered combination of Ng, Parulski, and Glatt is improper to render the claimed invention unpatentable for the following reason:

1) Ng, Parulski, and Glatt do not teach a physical motion detector, mounted on a camera and both directed at a location from approximately the same direction, to produce a motion indication signal that enables a computer to determine whether an activity condition is present. (Reply Br. 7-8.)

*Rejection D – Ng and Acosta*

Appellants contend that the Examiner's proffered combination of Ng and Acosta is improper to render the claimed invention unpatentable for the following reasons:

1) There is no motivation of record to combine Ng's surveillance system with Acosta's remote digital image viewing system. Specifically, Appellants argue that Acosta has nothing to do with surveillance systems. Further, there is no motivation for using the remote digital image viewing of Acosta with Ng, which has no desire to facilitate Internet access to acquired images. Extending Acosta's Internet access of images to Ng would be counter-productive since the image is associated with motion detection

which can trigger a direct communication to a police station in a more efficient manner. (Reply Br. 8.)

2) The Examiner failed to specifically address the limitations recited in claims 50, 52, and 54 through 61. Therefore, the rejection of these claims is improper. (Reply Br. 9.)

*Rejection E – Ng, Acosta, and Glatt*

Appellants contend that the Examiner's proffered combination of Ng, Acosta, and Glatt is improper to render the claimed invention unpatentable for the following reasons:

1) Glatt fails to teach or suggest the motion detector, as recited in claims 62 and 63, and at least one sensor as recited in claims 64 through 66. (Reply Br. 9.)

2) The Examiner failed to specifically address the limitations recited in claims 64 through 66. Therefore, the rejection of these claims is improper. (Reply Br. 9.)

ISSUES

The issues in the appeal before us are as follows:

(A) Have Appellants shown that the Examiner erred in rejecting claims 1, 2, 4, 5, 7 to 9, 11 to 18, 26 to 31, 39 to 44, 47, and 48 under 35 U.S.C. § 103 as being unpatentable over the combination of Ng and Maeno? Particularly, have Appellants shown that the Examiner erred because:

(i) this rejection is the product of an insufficient reason to combine the teachings of the references,

(ii) this rejection proffers an improper hindsight or obvious to try rejection, or

(iii) Ng and Maeno do not teach providing a surveillance image with an electronic mail message to a predetermined mailing address upon detecting an activity condition?

(B) Have Appellants shown that the Examiner erred in rejecting claims 1, 2, 4, 5, 7 to 9, 11, 12, 16 to 18, 26 to 31, 39 to 44, 47, and 48 under 35 U.S.C. § 103 as being unpatentable over the combination of Ng and Parulski? Particularly, have Appellants shown that the Examiner erred because:

(i) this rejection is the product of an insufficient reason to combine the teachings of the references,

(ii) this rejection proffers an improper hindsight or obvious to try rejection,

(iii) Parulski is non-analogous art,

(iv) Parulski is not prior art, or

(v) Ng and Parulski do not teach automatically sending pictures to a predetermined address in response to detecting an activity condition?

(C) Have Appellants shown that the Examiner erred in rejecting claims 13 to 15 under 35 U.S.C. § 103 as being unpatentable over the combination of Ng, Parulski, and Glatt? Particularly, have Appellants

shown that the Examiner erred because Ng, Parulski, and Glatt do not teach a physical motion detector, mounted on a camera and both directed at a location from approximately the same direction, to produce a motion indication signal that enables a computer to determine whether an activity condition is present?

(D) Have Appellants shown that the Examiner erred in rejecting claims 49, 50, and 52 to 61 under 35 U.S.C. § 103 as being unpatentable over the combination of Ng and Acosta? Particularly, have Appellants shown that the Examiner erred because:

- (i) there is no adequate reason to combine Ng and Acosta, or
- (ii) The Examiner failed to specifically address the limitations recited in claims 50, 52, and 54 through 61?

(E) Have Appellants shown that the Examiner erred in rejecting claims 62 to 66 under 35 U.S.C. § 103 as being unpatentable over the combination of Ng, Acosta, and Glatt? Particularly, have Appellants shown that the Examiner erred because:

- (i) Glatt fails to teach or suggest the motion detector, as recited in claims 62 and 63, and at least one sensor as recited in claims 64 through 66, or
- (ii) The Examiner failed to specifically address the limitations recited in claims 64 through 66?

## FINDINGS OF FACT

The following findings of fact are supported by a preponderance of the evidence.

### The Invention

1. According to Appellants, they invented a system (600) for remotely monitoring the internal region of a building (102), and for automatically notifying an interested user at a remote location (108) via the Internet (104) of a detected intrusion. (Spec. 8.)

2. As depicted in Figure 6, the monitoring system (600) includes a camera (604) coupled to an image controller (602) including a reference image (610), a comparison unit (612), an image transmission unit (614), and a notification unit (616). (Spec. 11-12.)

3a. The camera (604), having a motion detector (617) mounted thereon and located within the building (102), captures a sensor-detected image. The camera (604) forwards the captured image to a comparison unit (612) comparison with a reference image (610). Upon detecting a difference between the two images, the comparison unit (612) forwards the comparison result indicating an update condition to the image transmission unit (614) and the notification unit (616). Subsequently, the image transmission unit (614) transmits the captured image while the notification unit (616) notifies the user (108) of the resulting update condition via the Internet (104) through link (606). (Spec. 12-13.)

3b. Appellants' Specification indicates that the notification unit 616 can notify the interested user in various ways, such as telephone, cellular

phone, pager, electronic mail (i.e., e-mail), facsimile, etc. (Spec. 12-13.)

We find no explicit recitation in Appellants' Specification indicating that the notification is performed *automatically*. The prosecution history indicates that this language was first introduced in the claim in an amendment filed February 02, 2001.

#### Admitted Prior Art (APA)

4. Appellants admit that traditional surveillance systems conventionally include positioning cameras coupled with motion detectors throughout buildings and grounds for the purpose of remotely detecting and capturing images of persons or activities on such premises. Traditionally, security guards at a central location remotely view the captured images to detect the presence of unauthorized individuals. (Spec. 1.)

5. Appellants also admit that, traditionally, when the security system detects an intruder, an alarm is normally sounded, and the local police and/or a central office is notified via telephone. (Spec. 2.)

6. Appellants further admit that several patents<sup>9</sup> describe traditional surveillance systems that utilize cameras to capture images that are subsequently transmitted to off-site locations via telephone lines for the purpose of archiving or remote monitoring the captured images. (Spec. 2.)

7. Additionally, Appellants admit that Webcams are traditionally used for capturing images in various locations, and transmitted to remote

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<sup>9</sup> U.S. Patent Nos. 5,164,979; 5,412,708; and 5,553,609.



user computers via the Internet. Then, the users can remotely view the captured images from their computers. (Spec. 2.)

Ng

8. Ng discloses a system for detecting motion in a video signal. (Title, Abstract.) As shown in Figures 1 and 3, a camera (14) captures an image (16), which may represent an object area, environment, or a similar scene. The camera (14) then generates a video signal representing the captured image, and transmits the video signal to an image processor (12) that identifies differences between the captured image frame and a reference image frame. (Col. 3, ll. 50-58.)

9a. Ng further discloses a control logic (18) coupled to the image processor (12) to enable a user to specify a threshold level at which processor determines that a motion has occurred, and to subsequently output a motion detection signal (76). (Col. 3., l. 66 - col. 4, l. 11.)

9b. As shown in Figure 3, the image processor (12) includes a digitizer (62) for digitizing incoming video signals received from the camera (14), a current frame storage (64) for storing a received image frame, a reference frame storage for storing a reference image frame, a DMA logic (68) for comparing the two frames, a controller (72) for threshold values from user, a difference matrix (70) for determining determine differences between the frames, and a detector (74) that outputs a signal indicating motion has occurred. (Col. 6, ll. 3-47.)

10a. Upon detecting motion in the captured image, the image processor (12) outputs a warning tone across a communication medium (30), as well as a motion detection signal to a modem (28) to *automatically* contact a predefined interested user, such as the local police department, a security service, or particular employees or manager of the building. (Col. 4, ll. 39-49.)

10b. The detector (74) reviews signals received from the controller (72) and a difference matrix (70) to determine whether motion has occurred in a current image frame. *Id.* at 40-47.

10c. A modem (28) is coupled to the image processor (12) and the communication medium (30), which may include a network, an RF link or telephone line. The modem (28) is used to remotely monitor the status and operation of the image processor (12), as well as to contact a predetermined user such as the police, a security service, employees or a manager of the building. (Col. 4, ll. 39-49.)

11. The modem (28) can also *transmit the captured image to the predetermined user at the time the motion was detected*. This permits the recipient of the captured image to immediately view the triggering event and to immediately respond. (Col. 4, ll. 52-57).

#### Maeno

12. Maeno discloses a crime prevention system for remotely monitoring a building and for determining whether a person entering the building has been authorized to do so. (Abstract.)

13. As depicted in Figure 1, when a person enters the building, a sensor (101) sends a detection signal to a camera (102) to capture an image of the intruder. (Col. 5, ll. 11-25.)

14. An image processor (105) processes the captured picture into image data, and forwards the picture data to a first report controller (1040) to generate and transmit monitor data in a first report to a concentrator (200) through transmission line (PT1) (Col. 6, ll. 25-42.)

15. Upon receiving the first report, the concentrator (200) compares the received monitor data with data of authorized persons in an image database (207). If the comparison does not result in a match, the concentrator manager (208) sends the received intruder's face picture model data to a second report controller (211), which generates and transmits a second report data to a report receiver (300) through transmission line (PT2). (Col. 6, l. 58 - col. 7, l. 35; col. 8, ll. 49-68; col. 9, ll. 36-44.)

16. As shown in Figure 4, Maeno indicates that the report receiver (300) data immediately prints out the report, and transmits it to the police, and a security company via facsimile. (Col. 9, 48-59.)

17. Maeno indicates that the second report including the intruder's face model data is transmitted to the report receiver (300) and to the police via facsimile or other image transmission techniques. (Col. 10, ll. 7-17.)

18. Maeno further indicates that a specified telephone set can be provided in the concentrator to automatically call when a non-matching signal is issued. (Col. 10, ll. 39-48.)

Parulski

19. Parulski discloses a digital camera (12) for capturing digital images and for creating print orders. The camera (12) is able to communicate with a service provider (14) and equipment at a walk-up kiosk (16) over a communications network (31). (Col. 2, ll. 53-65; priority doc. (60/037,963) p.4, ll. 18-31).

20. The digital camera (12) includes an interface (24) that allows a user view captured images, as well as to select which images by size and quantity that the user desires to print or e-mail. (Col. 3, ll. 25-58; priority doc. p. 5, l. 24 - p. 6, l. 26.).

21. Parulski indicates that if the camera includes a transmitter, upon completing an e-mail order, it would automatically send selected images to addresses of designated recipients. (Col. 4, ll. 29-36; priority doc. p. 7, l. 31 - p. 5, l. 5.)

Glatt

22. As depicted in Figure 4, Glatt discloses a video surveillance system (210) having a monitoring station (220) that communicates with a video camera module (240) via a public switched communications network (280). (Col. 6, ll. 3-10.)

23. The camera module (240) includes a motion detector (260) that analyzes video image signals output by a camera (242) to determine whether the subject under surveillance has moved. (Col. 7, ll. 59-63.)

24. Upon detecting that the subject has moved, the detector (260) generates a signal (262) to the microprocessor (256) to begin transmitting video images over the network. (Col. 8, ll. 2-8.)

#### Acosta

25. Acosta discloses, as shown in Figure 1, a system for remotely viewing digital images from a plurality of locations. The remote viewing system (10) includes a plurality of camera devices (12) coupled to a wireless network (14), and a central office video management system (COVMS) (16), subsequently linked to a World Wide Web server (18) coupled to the Internet (20), and a computer (22). (Col. 4, ll. 26-41.)

26. The cameras (12) upload captured digital images to the COVMS (16) via the wireless network (14). The COVMS (16) processes the uploaded digital images, and transfers the processed digital images to the WWW server (18) for storage. Users, through browsers on their remote computers (22), can access the processed images on the WWW server (18) via the Internet. (Col. 7, ll. 10-24; col. 8, ll. 1-34.)

### PRINCIPLES OF LAW

#### OBVIOUSNESS

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir.

2006) (“On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.”) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) wherein evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”). *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting *KSR Int’l v. Teleflex, Inc.*, 127 S. Ct. 1727, 1739 (2007)). “One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for

which there was an obvious solution encompassed by the patent's claims.”  
*KSR*, 127 S. Ct. at 1742.

Discussing the obviousness of claimed combinations of elements of prior art, *KSR* explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* [v. *AG Pro, Inc.*, 425 U.S. 273 (1976)] and *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969)] are illustrative - a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

*KSR*, 127 S. Ct. at 1740. Where the claimed subject matter cannot be fairly characterized as involving the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness can be based on a showing that there was “an apparent reason to combine the known elements in the fashion claimed.” *KSR*, 127 S. Ct. at 1740-41. Such a showing requires “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, 127 S. Ct. at 1741 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

The reasoning given as support for the conclusion of obviousness can be based on interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art. *KSR*, 127 S. Ct. at 1740-41. *See also Dystar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1368 (Fed. Cir. 2007) which states:

[A]n implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the “improvement” is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient. Because the desire to enhance commercial opportunities by improving a product or process is universal—and even common-sensical—we have held that there exists in these situations a motivation to combine prior art references even absent any hint of suggestion in the references themselves. In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him capable of combining the prior art references.

*Leapfrog*, 485 F.3d at 1162 (holding it “obvious to combine the Bevan device with the SSR to update it using modern electronic components in order to gain the commonly understood benefits of such adaptation, such as decreased size, increased reliability, simplified operation, and reduced cost”).

Also, a reference may suggest a solution to a problem it was not designed to solve and thus does not discuss. As stated in *KSR*:



Common sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle. . . . A person of ordinary skill is also a person of ordinary creativity, not an automaton.

*KSR*, 137 S. Ct. at 1742.

The prior art relied on to prove obviousness must be analogous art.

As explained in *Kahn*,

the “analogous-art” test . . . has long been part of the primary Graham analysis articulated by the Supreme Court. *See Dann* [*v. Johnston*,] 425 U.S. [219,] 227-29 . . . [1976], *Graham*, 383 U.S. at 35. . . The analogous-art test requires that the Board show that a reference is either in the field of the applicant's endeavor or is reasonably pertinent to the problem with which the inventor was concerned in order to rely on that reference as a basis for rejection. *In re Oetiker*, 977 F.2d [at] 1447 . . . References are selected as being reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art. *Id.* (“[I]t is necessary to consider ‘the reality of the circumstances,’—in other words, common sense—in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor.” (quoting *In re Wood*, 599 F.2d 1032, 1036 (C.C.P.A. 1979))).

*Kahn*, 441 F.3d at 986-87. *See also In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992) (“[a] reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.”).

In view of KSR's holding that "*any* need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed," 127 S. Ct. at 1742 (emphasis added), it is clear that the second part of the analogous-art test as stated in *Clay, supra*, must be expanded to require a determination of whether the reference, even though it may be in a different field from that of the inventor's endeavor, is one which, because of the matter with which it deals, logically would have commended itself to an artisan's (not necessarily the inventor's) attention in considering *any* need or problem known in the field of endeavor. Furthermore, although under *KSR* it is not always necessary to identify a known need or problem as a motivation for modifying or combining the prior art, it is nevertheless always necessary that the prior art relied on to prove obviousness be analogous. See *KSR*, 127 S. Ct. at 1739 ("The Court [in *United States v. Adams*, 383 U.S. 39, 40 (1966)] recognized that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another *known in the field*, the combination must do more than yield a predictable result.") (emphasis added). See also *Sakraida*, 425 U.S. at 280 ("Our independent examination of that evidence persuades us of its sufficiency to support the District Court's finding 'as a fact that each and all of the component parts of this patent . . . were old and well-known throughout the dairy industry long prior to the date of the filing of the application for the Gribble patent.'").

## ANALYSIS

### A. 1. *Claim 1*

We begin our analysis with a side-by-side comparison of the teachings of Ng, Maeno, Parulski, and the Admitted Prior Art (APA), as detailed in the findings of facts (FF) section above, with the limitations of independent claim 1 as follows:

Claim 1

Prior Art

<p>A surveillance method for operating a general purpose computer to provide remote surveillance of an internal area of a building, comprising:</p>	<p>Ng teaches a surveillance system having an image processor for remotely detecting motion in a video signal. (FF 8.)</p> <p>Maeno teaches a crime prevention system with an image processor for remotely monitoring the internal area of a building. (FF 12, 14.)</p> <p>APA teaches surveillance systems traditionally include computers for remotely monitoring buildings. (FF 4, 7.)</p>
<p>receiving a surveillance image from a local camera directed at the internal area of the building;</p>	<p>Ng teaches the surveillance system using a camera for capturing image. (FF 8.)</p> <p>Maeno teaches the crime prevention system includes a camera to capture images within a building. (FF 12.)</p> <p>APA teaches surveillance systems traditionally use cameras to capture images inside a building. (FF4.)</p>

<p>comparing the surveillance image with a reference image to produce a comparison result;</p>	<p>Ng teaches an image processor that compares a captured image frame with a reference image frame to produce a difference. (FF 8.)</p> <p>Maeno teaches a concentrator that compares captured image data with data of authorized users. (FF 15.)</p> <p>APA teaches that conventionally security guards review captured pictures to detect unauthorized activities. (FF 4.)</p>
<p>detecting presence of an activity condition based on the comparison result; and</p>	<p>Ng teaches detecting motion in a video image as a result of the comparison. (FF 8, 9.)</p> <p>Maeno teaches detecting unauthorized activity as a result of the comparison. (FF 15.)</p> <p>APA teaches that security guards review captured pictures to detect unauthorized activities. (FF 4.)</p>
<p>notifying an interested user of the activity condition when the presence of the activity condition is detected,</p>	<p>Ng teaches, upon detecting motion in the captured video data, notifying a predetermined user. (FF 10a-10c.)</p> <p>Maeno teaches, upon detecting unauthorized activities inside the building, notifying a predetermined user. (FF 15, 16.)</p> <p>APA teaches that the security guards notify a predetermined user upon detecting unauthorized</p>

	activities within the building. (FF 5.)
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<p>configuring, prior to said receiving, comparing, detecting and notifying, said general purpose computing device so as to automatically notify the interested user via a predetermined mailing address when an activity condition is subsequently detected,</p>	<p>Ng teaches image processor is preconfigured to automatically notify a user via a modem coupled to a communication medium. (FF 10a-c.)</p> <p>Maeno teaches a report receiver is preconfigured to fax a generated activity report to a predetermined user. Maeno further teaches that the concentrator is preconfigured to automatically call the user upon detecting unauthorized activities. (FF 16-18.)</p> <p>Parulski teaches that users can designate recipients ahead of time such that selected pictures can be automatically sent to predetermined electronic addresses of the designated recipients when said pictures are ready for distribution. (FF 21.)</p>
<p>wherein said notifying includes at least transmitting the surveillance image to a remote computer over a global computer network automatically when the activity condition is detected, and</p>	<p>Ng teaches the image processor, upon detecting motion in the video data, automatically transmits the captured image to a predetermined user at a remote computer via a modem connected to a communication medium. (FF 10a-10c, 11.)</p> <p>Maeno teaches, upon detecting unauthorized activities in the building, faxing over a transmission line (or via other image transmission techniques) the activity report</p>

	<p>including the intruder's face picture data model. (FF 15-17.)</p> <p>Parulski teaches a digital camera for capturing images. (FF 19.)</p> <p>Parulski teaches automatically sending via e-mail pre-selected images to designated recipients when the pictures are ready for distribution. (FF 21.)</p> <p>APA teaches that conventional surveillance systems transmit captured images via the Internet to computers of remote users. (FF 6, 7.)</p>
<p>wherein said transmitting includes forming an electronic mail message having a predetermined mailing address, the predetermined mailing address being associated with the interested user and being provided during said configuring, and electronically mailing the surveillance image to the remote computer over the network using the electronic mail message.</p>	<p>Ng teaches, upon detecting motion in the video image data, electronically sending the captured image data to a predetermined user via a modem connected to a communication medium. (FF 10a-11.)</p> <p>Maeno teaches, upon detecting unauthorized activities inside a monitored building, faxing an activity report including the intruder's face picture model to a predetermined user. (FF 15-17.)</p> <p>Parulski teaches electronically sending selected pictures to the e-mail addresses of designated recipients. (FF 21.)</p>



	APA teaches, upon detecting unauthorized activities, traditional surveillance systems electronically transmit captured images to remote computers of predetermined users via the internet. (FF 6, 7.)
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A. 2. *Claims 1, 2, 4, 5, 7-9, 11-18, 26-31 - Ng and Maeno*

As detailed in the preceding comparison table, the combined disclosures of Ng and Maeno reasonably teach the limitations of representative claim 1. Particularly, Ng discloses an image processor that, upon detecting a motion in a video image data, automatically transmits the captured image data to a predetermined user via a modem connected to a communication network (FF 9-11). Maeno discloses transmitting by facsimile (or other image transmission techniques) an activity report including the intruder's face picture model to a predetermined user upon detecting an unauthorized activity within a monitored building. (FF 15-17.)

Further, as detailed in the comparison table above, Appellants' admission confirms that electronically transmitting a captured image to a remote user is a conventional practice that is traditionally used for the purpose of remotely monitoring a building. (FF 5-7.)

Therefore, we find that the claim limitation of electronically transmitting captured images to a remote computer is a *known practice*, which is being used for a *known purpose* to achieve a *known result*. Thus, we find that one of ordinary skill would have readily recognized that Ng's

apparatus, taken in combination with Maeno's disclosure, would have *predictably* resulted in automatically transmitting an electronic message with a surveillance image to the predetermined address of a user at a remote computer upon detecting an activity.

The Supreme Court has held that in analyzing the obviousness of combining elements, a court may consider "the background knowledge possessed by a person having ordinary skill in the art" and "the inferences and creative steps that a person of ordinary skill in the art would employ." *See KSR* at 1740-41. To be nonobvious, an improvement must be "more than the predictable use of prior art elements according to their established functions." *Id.* at 1740. Appellant's overall combination amounts to a combination of old elements, each being used for its known and intended purpose. Under the circumstances, the claimed combination is therefore unpatentable under § 103. *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1960).

In light of these findings, we find unpersuasive Appellants' argument that the proffered combination of Ng and Maeno is improper (Issues (A)(i) and (ii) *supra*), and that it does not teach the limitation of automatically transmitting an electronic message with a surveillance image to the predetermined address of a user at a remote computer upon detecting an activity (Issue (A)(iii) *supra*). Further, we find unpersuasive for these same reasons Appellants' argument that Maeno has nothing to do with surveillance images (Issue (A) (iii) *supra*). As a matter of fact, Maeno's crime prevention system captures images within or around a building under

surveillance to detect unauthorized activities therefrom, to generate a report including the captured surveillance image data, and to fax the generated report of such activities to a predetermined user. (FF 12-18.) Therefore, we find that, by suggesting transmitting the generated report via facsimile or other image transmission techniques, Maeno's teaching encompasses rather than precludes the electronic transmission of captured surveillance images as in Ng and Appellant's disclosure. It follows that the Examiner did not err in rejecting independent claim 1 as being unpatentable over the combination of Ng and Maeno.

Appellants did not separately argue the rejection of claims 1, 2, 4, 5, 7-9, 11-18, and 26-31 over the combination of Ng and Maeno. Therefore, we select independent claim 1 as being representative of this group of claims. Claims 2, 4, 5, 7-9, 11-18, and 26-31 consequently fall together with representative claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii).

*B. Claims 1, 2, 4, 5, 7-9, 11, 12, 16-18, 26-31 - Ng and Parulski*

We begin our analysis of this combination with Appellants' argument that Parulski has not been properly established as prior art (Issue (B)(iv) *supra*). We disagree.

(1)

The Examiner made out a *prima facie* case that Parulski qualifies as prior art under 35 U.S.C. 102(e) by relying on the Parulski filing date, which is earlier than Appellants' filing date.

The order of events is the following:

1. Feb. 20, 1997: Parulski files provisional.
2. Jul. 1, 1997: Appellants file provisional.
3. Nov. 24, 1997: Parulski files application which matures into a patent.
4. Jun. 16, 1998: Appellants file application on appeal.

These dates establish that Parulski is prior art under 35 U.S.C. § 102(e).

Appellants assert, without any explanation or analysis, that they are entitled to the benefit of their provisional application. A mere assertion is not enough. *Cf. Wagoner v. Barger*, 463 F.2d 1377 (CCPA 1972) (party seeking benefit has burden).

Had Appellants timely asserted the claim to priority, and made out a case before the Examiner, then and only then would Appellants have an appealable issue to raise before the Board. Furthermore, had Appellants convinced the Examiner, then the Examiner would have the burden to establish that Parulski is entitled to its provisional application. *Cf. In re Wertheim*, 646 F.2d 527 (CCPA 1981).

By failing to establish their right to benefit in the first instance before the Examiner, Appellants have waived that right on appeal.

In any event, we have reviewed the Parulski priority document. Claim "1" of the Parulski patent is supported in Figure 1 of the Parulski provisional as follows:

An electronic still camera [12] for capturing images that can be printed by a separate printing device, the electronic still camera comprising:

- (a) an image sensor (20) for capturing a plurality of images of scenes and for producing image signals representative of the corresponding scenes;
- (b) an analog-to-digital converter (22) for digitizing the image signals to produce digital images;
- (c) a removable memory card (36) for storing a plurality of digital image files corresponding to the digital images;
- (d) an internal memory (32) for storing at least one digital image to be displayed;
- (e) a processor (29) for controlling the transfer of the digital images from the removable memory card to the internal memory and for producing a print utilization file;
- (f) a display (24) coupled to the internal memory for displaying at least one digital image; and
- (g) a user interface (26) for scrolling through the plurality of digital images stored on the removable memory card in order to display particular digital images and for selecting particular digital images to be printed, wherein the print utilization file includes the names of at least two digital image files to be printed by the printing device, the at least two digital image files corresponding to selected ones of the digital images produced from the images captured by the image sensor, and the processor stores the print utilization file on the removable memory card separate from the digital image files. [Pages 5, 6, and 11.]

Even had Appellants not waived their right to claim priority, it is manifest that Parulski is entitled to benefit of its provisional application and the filing date of that provisional application antedates the filing date of Appellants' provisional.

Next, we address the merits of the combination as it pertains to the rejection of representative claim 1. As detailed in the comparison table above, the combined disclosures of Ng and Parulski reasonably teach the limitations of representative claim 1. Particularly, Ng teaches an image processor that, upon detecting motion in a video image data, automatically transmits the captured image to a user at a remote computer via a modem connected to a communication medium. (FF 10-11.) Parulski also teaches electronically transmitting selected images to the respective e-mail addresses of designated recipients as soon as said selected images are available for distribution. (FF 21.) Further, as detailed in the comparison table above, Appellants' admission confirms that electronically transmitting a captured image to a remote user is a conventional practice that is traditionally used for the purpose of remotely monitoring a building. (FF 5-7.) Thus, on the record before us, the claim limitation of electronically transmitting captured images to a remote computer is a *known practice*, which is being used for a *known purpose* to achieve a *known result*.

We, therefore, find that the ordinarily skilled artisan would have readily recognized that Ng's apparatus, taken in combination with Parulski's disclosure, would have *predictably* resulted in automatically transmitting a captured image of the e-mail address designated recipients upon detecting an activity condition.

In light of these findings, we disagree with Appellants' argument that the proffered combination of Ng and Parulski is improper (Issues (B)(i) and (ii) *supra*), and that it does not teach automatically transmitting captured

images to a predetermined address in response to detecting an activity condition (Issue (B)(v) *supra*). For these same reasons, we also disagree with Appellants' argument that Ng and Parulski are not analogous art (Issue (B)(iii) *supra*). We note that Parulski's teaching, which the Examiner relied upon in rejecting claim 1, is relevant to the claimed invention. Particularly, we find that Parulski's teaching of transmitting selected pictures to designated recipients via e-mail when the pictures are available for distribution is relevant to the claim limitation calling for e-mailing captured pictures to addresses of interested users. (See comparison table above.) It follows that the Examiner did not err in rejecting independent claim 1 as being unpatentable over the combination of Ng and Parulski.

Appellants did not separately argue the rejection of claims 1, 2, 4, 5, 7-9, 11, 12, 16-18, and 26-31 over the combination of Ng and Parulski. Therefore, independent claim 1 is representative of this group of claims, and claims 2, 4, 5, 7-9, 11, 12, 16-18, and 26-31 consequently fall together with representative claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii).

### *C. Claims 13-15 – Ng, Parulski, and Glatt*

We begin our analysis of this combination with a side-by-side comparison of the teachings of Ng, Parulski, Glatt, and the Admitted Prior Art (APA), as detailed in the findings of facts (FF) section above, with the limitations of claims 13 through 15 as follows:

Claims 13-15

Prior Art

<p>13. A system as recited in claim 8, wherein said system further comprises a motion detector for producing a motion indication signal, and</p>	<p>Ng teaches a detector (74) that examines video signals received from a difference matrix and a controller to determine whether motion has occurred in current image frame. (FF 8-9.)</p> <p>Glatt teaches a motion detector that analyzes image signals output by a camera to determine whether motion has occurred in the signal under review. (FF 23.)</p> <p>APA teaches that traditional surveillance systems utilize motion sensors in conjunction with cameras for the purpose of detecting motion, and capturing images in buildings being monitored. (FF 4.)</p>
<p>wherein said local general purpose computer receives the motion indication signal and determines whether an activity condition is present based on the motion indication signal.</p>	<p>Ng teaches an image processor that receives a video signal, and determines whether a frame data in the signal has exceeded a predetermined threshold indicating motion in the signal. (FF 9.)</p> <p>Glatt teaches a camera module having a camera that forwards a captured image signal to a motion detector to detect whether motion has occurred. (FF 23-24.)</p> <p>APA teaches that security guards review captured images to</p>



	detect the presence of intruders. (FF 4.)
14. (Original) A system as recited in claim 13, wherein said motion detector and said camera is directed at the location from approximately the same direction.	APA teaches using motion sensors in security systems to detect motion in monitored area. (FF 4.)
15. (Original) A system as recited in claim 14, wherein said motion detector is mounted on said camera.	Ng teaches a camera coupled to an image processor including a detector. (FF 8.) Glatt teaches a camera module that includes a camera coupled to a motion detector. (FF 23.)

As detailed in the preceding comparison table, the combined disclosures of Ng, Parulski, and Glatt reasonably teach the limitations of dependent claims 13 through 15. Particularly, Ng teaches a camera coupled to general purpose computer including a motion detector for examining an image frame obtained from the camera in order to determine whether motion has occurred in the frame under examination. (FF 8-9.) Similarly, Glatt teaches a camera module including a camera coupled to a motion detector, wherein the camera forwards a captured image to the motion detector, which determines whether motion has occurred in the received image. (FF 23-24.) Further, as detailed in the comparison table above, Appellants' admission confirms that coupling motion detectors with a camera is traditionally used for the purpose of detecting motion in a building under surveillance. (FF 4.) Thus, on the record before us, we find that coupling a detector with a camera

in a remote surveillance system is a *known practice*, which is being used for a *known purpose* to achieve a *known result*.

We, therefore, find that the ordinarily skilled artisan would have readily recognized that Ng's apparatus, taken in combination with Parulski's and Glatt's disclosures would have *predictably* resulted in a computerized surveillance system that analyzes a sensor-detected image to determine whether motion has occurred in the captured image. Additionally, we find that it is merely common sense for the ordinarily skilled artisan to have recognized that in order for the motion detector to detect or sense a motion, it must be directed in approximately the same direction as the camera to which it is coupled.

In light of these findings, we disagree with Appellants' argument that the proffered combination of Ng, Parulski, and Glatt is improper, and does not teach a sensor mounted on a camera, both being directed from approximately the same direction to produce a motion indication signal that enables a computer to determine whether an activity condition is present. It follows that the Examiner did not err in rejecting dependent claims 13 through 15 as being unpatentable over the combination of Ng, Parulski, and Glatt.

#### *D. Claims 49, 50, 52-61 – Ng and Acosta*

Appellants did not separately argue the rejection of claims 49, 50, and 52-61 *in substance* over the combination of Ng and Acosta. Appellants merely argued a lack of motivation to combine the cited references. (Reply

Br. 8.) Further, Appellants allege that the Examiner did not address the limitations recited in each of claims 50, 52, 54-61. (Reply Br. 9.) However, Appellants' arguments fail to particularly show that the cited combination does not teach at least one claim limitation. Therefore, we select independent claim 49 as being representative of this group of claims. Claims 50 and 52 through 61 consequently fall together with representative claim 49. *See* 37 C.F.R. § 41.37(c)(1)(vii).

We begin our analysis of this combination with a side-by-side comparison of the teachings of Ng, Acosta, and the Admitted Prior Art (APA), as detailed in the findings of facts (FF) section above, with the limitations of claim 49 as follows:

Claim 49	Prior Art
49. A method for operating a general purpose computer to detect an activity condition using a camera, comprising the acts of:	Ng teaches a method for operating an image processor to detect activity motion in a video signal using a camera. (FF 8, 9.) APA teaches surveillance systems traditionally include computers for remotely monitoring buildings. (FF 4, 7.)
(a) receiving a reference image from a camera directed in a predetermined direction;	Ng teaches receiving a reference image frame from a camera. (FF 8, 9.)
(b) storing a reference image	Ng teaches storing the reference image frame in a storage buffer. (FF 8, 9.)

(c) receiving a current image from a camera directed in the predetermined direction;	<p>Ng teaches receiving a current image frame from the camera. (FF 8, 9.)</p> <p>APA teaches that surveillance systems traditionally use cameras to capture images inside a building. (FF 4.)</p>
(d) comparing the current image with the reference image to detect an activity condition;	<p>Ng teaches the image processor comparing a current image frame with a reference image frame to detect motion. (FF 8, 9.)</p> <p>APA teaches that security guards conventionally review captured images to detect unauthorized activities. (FF 4.)</p>
(e) signaling an alarm condition when said comparing detects the activity condition without using any special purpose hardware other than the general purpose computer and the camera; and	<p>Ng teaches the image processor generating a warning tone upon detecting a motion in the video signal. (FF 10.)</p> <p>APA teaches that an alarm is traditionally sounded upon detecting unauthorized activities within a building. (FF 5.)</p>
(f) transmitting at least the current image over a network to a remote computer upon detecting the activity condition,	<p>Ng teaches transmitting the current image frame over a communication network upon detecting a motion in the video signal. (FF 10.)</p> <p>APA teaches that conventional surveillance systems transmit images captured by a plurality of cameras to</p>

	computers of remote users via the Internet. (FF 6, 7.)
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wherein the network comprises the Internet, and wherein the remote computer is an Internet server that stores images from a plurality of different cameras,	<p>Acosta teaches a plurality of camera devices that upload images captured from a plurality of locations to a web server via the Internet. (FF 26.)</p> <p>APA teaches that conventional surveillance systems transmit images captured by a plurality of cameras to computers of remote users via the Internet. (FF 6, 7.)</p>
and wherein an interested user is able to view at least certain of the images by accessing the Internet server via a web browser application on a user computer.	<p>Acosta teaches that users at remote computers can access processed pictures stored on a web server via the Internet. (FF 26.)</p> <p>APA teaches that conventional surveillance systems permit remote users to view captured images from their computer via the Internet. (FF 6, 7.)</p>

As detailed in the comparison table above, the combined disclosures of Ng and Acosta reasonably teach the limitations of representative claim 49. Particularly, Ng teaches an image processor that, upon detecting motion in a video image data, automatically generates a warning tone, and transmits the captured image to a user at a remote computer via a modem connected to a communication medium. (FF 10-11.) Acosta teaches a plurality of cameras for uploading images captured from different locations to a webserver via the Internet such that a remote user can access the uploaded

images from their computers. (FF 26.) Further, as detailed in the comparison table above, Appellants' admission confirms that using a plurality of cameras to transmit captured images to remote users' computers via the Internet is a conventional practice that is traditionally used for the purpose of remotely monitoring a building. (FF 5-7.) Thus, on the record before us, we find that the claim limitation of allowing users to remotely view captured images from their computers via the Internet is a *known practice*, which is being used for a *known purpose* to achieve a *known result*. We, therefore, find that the ordinarily skilled artisan would have readily recognized that Ng's apparatus, taken in combination with Acosta's disclosure, would have *predictably* resulted in a surveillance system that enables interested users to remotely view images captured from different locations in a building under surveillance indicating that certain condition has been detected.

In light of these findings, we disagree with Appellants' argument that the proffered combination of Ng and Acosta is improper.

We also disagree with Appellants' argument that Acosta has nothing to do with a surveillance system such as Ng. (Issue (D)(i).) Acosta's teaching upon which the Examiner relied to reject claim 49 is relevant to a surveillance system as in the claimed invention, and as in Ng. Particularly, we find that Acosta's teaching of allowing users to access a web server to remotely view from their computers images captured by cameras from different locations is relevant to the claim limitation of interested users being able to view certain images from their computers by accessing a web server.

(See comparison table above.) Further, we find that Acosta's remote digital viewing system is pertinent to Ng's surveillance system since they both use cameras to capture and transmit images of locations being monitored or under surveillance. It follows that the Examiner did not err in rejecting independent claim 49 as being unpatentable over the combination of Ng and Acosta.

*E. Claims 62-66 - Ng, Acosta, and Glatt*

Appellants did not separately argue the rejection of claims 62-66 over the combination of Ng, Acosta, and Glatt. Therefore, we select dependent claims 62 and 64 as being representative of this group of claims. Claims 63, 65, and 66 consequently fall together with representative claims 62 and 64. *See* 37 C.F.R. § 41.37(c)(1)(vii).

We begin our analysis of this combination with a side-by-side comparison of the teachings of Ng, Acosta, Glatt, and the Admitted Prior Art (APA), as detailed in the findings of facts (FF) section above, with the limitations of representative claims 62 and 64 as follows:

Claims 62 and 64	Prior Art
62. A system as recited in claim 58, wherein said system further comprises a motion detector for producing a motion indication signal, and	Ng teaches a detector that examines video signals received from a difference matrix and a controller to determine whether motion has occurred in current image frame. (FF 8-9.) APA teaches that traditional



	surveillance systems utilize motion sensors in conjunction with cameras for the purpose of detecting motion, and capturing images in buildings being monitored. (FF 4.)
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<p>wherein said local general purpose computer receives the motion indication signal and determines whether an activity condition is present based on the motion indication signal.</p>	<p>Ng teaches an image processor that receives a video signal, and determines whether a frame data in the signal has exceeded a predetermined threshold indicating motion in the signal. (FF 9.)</p> <p>APA teaches that security guards review captured images to detect the presence of intruders. (FF 4.)</p>
<p>64. A system as recited in claim 58, wherein said system further comprises a security system having at least one sensor, and wherein said security system detects an alarm condition, the activity condition is made to be present.</p>	<p>Ng teaches sounding a warning tone upon the motion detector determining that a motion has occurred in the captured image. (FF 10a-10c.)</p> <p>APA teaches using motion sensors in security systems to detect motion in monitored area. (FF 4.)</p>

As detailed in the preceding comparison table, the combined disclosures of Ng, Acosta, and Glatt reasonably teach the limitations of dependent claims 62 and 64. Particularly, Ng teaches a camera coupled to a general purpose computer including a motion detector for examining an image frame obtained from the camera in order to determine whether motion has occurred in the frame under examination. (FF 8-9.) Further, Ng teaches sounding a warning tone upon determining that motion has occurred in the captured image. (FF 10.) Additionally, as detailed in the comparison table above, Appellants' own admission confirms that motion sensors are

traditionally used with a camera for the purpose of detecting motion in a building under surveillance. (FF 4.) Thus, on the record before us, we find that coupling a motion sensor with a camera in a remote surveillance system is a *known practice*, which is being used for a *known purpose* to achieve a *known result*. We, therefore, find that the ordinarily skilled artisan would have readily recognized that Ng's apparatus, taken in combination with Acosta's and Glatt's disclosures, would have *predictably* resulted in computerized surveillance system that sounds a warning alarm upon a motion detector which determines that motion has occurred in a sensor-detected image.

In light of these findings, we find unpersuasive Appellants' argument that the proffered combination of Ng, Acosta, and Glatt is improper. It follows that the Examiner did not err in rejecting representative claims 62 and 64 as being unpatentable over the combination of Ng, Acosta, and Glatt.

#### CONCLUSIONS OF LAW

We conclude that Appellants have not shown that:

(1) the Examiner erred in holding that the combined disclosures of Ng and Maeno render claims 1, 2, 4, 5, 7 through 9, 11 through 18, 26 through 31, 39 through 44, 47, and 48 unpatentable under 35 U.S.C. § 103(a);

(2) the Examiner erred in holding that the combined disclosures of Ng and Parulski render claims 1, 2, 4, 5, 7 through 9, 11, 12, 16 through 18,

26 through 31, 39 through 44, 47, and 48 unpatentable under 35 U.S.C. § 103(a);

(3) the Examiner erred in holding that the combined disclosures of Ng, Parulski, and Glatt render claims 13 through 15 unpatentable under 35 U.S.C. § 103(a);

(4) the Examiner erred in holding that the combined disclosures of Ng and Acosta render claims 49, 50, and 52 through 61 unpatentable under 35 U.S.C. § 103(a); and

(5) the Examiner erred in holding that the combined disclosures of Ng, Acosta, and Glatt render claims 62 through 66 unpatentable under 35 U.S.C. § 103(a).

#### DECISION

We vacate the merits panel Decision mailed on December 21, 2006, and we substitute this expanded panel Decision in its place.

We affirm the Examiner's decision rejecting claims 1, 2, 4, 5, 7 through 9, 11 through 18, 26 through 31, 39 through 44, 47 through 50 and 52 through 66.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

cli

Appeal 2006-2758  
Application 09/098,279

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